ABSTRACT

A control device (30) receives an output voltage (Vm) of a voltage-up converter (12) from a voltage sensor (13), and calculates a feedback preliminary voltage control value determined by the difference between a voltage control value and the output voltage (Vm). The control device (30) corrects the calculated feedback preliminary voltage control value in accordance with the output voltage (Vm) to calculate a feedback voltage control value where the follow-up property of the output voltage (Vm) with respect to the voltage control value is equal to a reference property. The control device (30) controls the voltage-up converter (12) using a feedback voltage control value. The voltage-up converter (12) converts a direct current voltage (Vb) from a DC power supply (B) into the output voltage (Vm) maintaining the follow-up property of the output voltage with respect to the voltage control value at the reference property.